

Patent claims

1. A method for decontaminating a clean-room (1; 101), in which the clean-room (1; 101) is supplied with gaseous H_2O_2 and H_2O_2 still present in the clean-room (1; 101) is chemically broken down without catalyst at a later timepoint by supplying at least one gaseous agent which reacts with the H_2O_2 .
2. The method as claimed in claim 1, characterized in that H_2O_2 residues in a product situated in the clean-room (1; 101) are subsequently broken down on the product in a targeted manner.
3. The method as claimed in claim 1 or 2, characterized in that the at least one gaseous agent is metered in such a manner that after the chemical breakdown of the H_2O_2 at most 1 ppm of H_2O_2 still remains in the clean-room.
4. The method as claimed in one of claims 1 to 3, characterized in that the at least one gaseous agent comprises ammonia.
5. The method as claimed in claim 4, characterized in that the ammonia is metered as a function of the H_2O_2 in such a manner that the excess of ammonia is at most 500 ppm.
6. The method as claimed in one of claims 1 to 5, characterized in that the at least one gaseous agent comprises hydrazine.
7. The method as claimed in one of claims 1 to 6,

characterized in that the at least one gaseous agent comprises ozone.

8. A system for decontaminating a clean-room (1; 101)
5 having an H_2O_2 supply device (2; 102) for supplying the clean-room (1; 101) with H_2O_2 , characterized in that it comprises an H_2O_2 breakdown device (10; 111-115) for effecting a chemical breakdown of H_2O_2 without catalyst in the clean-room (1; 101), which comprises means for
10 introducing at least one gaseous agent into the clean-room (1; 101).

9. The system as claimed in claim 8, characterized in that the means for introducing at least one gaseous agent are
15 constructed to introduce ammonia, hydrazine or ozone into the clean-room (1; 101).

10. The system as claimed in claim 8 or 9, characterized in that the means for introducing at least one gaseous agent
20 into the clean-room (1; 101) have a supply vessel (11) filled with gaseous agent, or a generator (111) for generating gaseous agent, a gas line (13; 113) from the supply vessel (11) or generator (111) to the clean-room (1; 101) and a valve (12, 112) for regulating the amount of the gaseous
25 agent flowing through the gas line (13; 113).

11. The system as claimed in one of claims 8 to 10, characterized in that it has a sensor for measuring the concentration of the gaseous agent (4; 104) in the clean-room
30 (1; 101), the measured values of which serve to control the H_2O_2 breakdown device (10; 111-115).

12. The system as claimed in one of claims 8 to 11, characterized in that it has a sensor for measuring the H₂O₂ concentration (5; 105) in the clean-room (1; 101), the measured values of which serve to control the H₂O₂ breakdown
5 device (10; 111-115).

13. The system as claimed in one of claims 8 to 12, characterized in that the H₂O₂ breakdown device has means for generating UV light in the clean-room (1; 101).

10 14. The system as claimed in one of claims 8 to 13, characterized in that the H₂O₂ breakdown device (111-115) and the H₂O₂ supply device (102) are integrated into a periphery (103) of the clean-room (101).

15 15. An H₂O₂ breakdown device (10; 111-115) for a system for decontaminating a clean-room (1; 101) according to one of claims 8 to 14.